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<b>(21) International Application Number:</b> PCT/US96/02164 <b>(22) International Filing Date:</b> 14 February 1996 (14.02.96)  <b>(30) Priority Data:</b> 95/1184 14 February 1995 (14.02.95) ZA 95/3153 19 April 1995 (19.04.95) ZA  <b>(71) Applicant (for all designated States except AL US):</b> TRADE-FAST 1 (PROPRIETARY) LIMITED [ZA/ZA]; c/o Aiken & Peat, Southern Life Place, 21 Riebeeck Street, Cape Town, Western Cape 8001 (ZA).  <b>(71) Applicant (for AL only):</b> HANDELMAN, Joseph, H. [US/US]; 26 West 61st Street, New York, NY 10023 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> SMIEDT, Leslie [ZA/ZA]; 1 Vesperdene Mews, 9 Vesperdene Road, Green Point, Cape Town, Western Cape 8001 (ZA). KALISH, Peter [ZA/ZA]; 1 Vesperdene Mews, 9 Vesperdene Road, Green Point, Cape Town, Western Cape 8001 (ZA).  <b>(74) Agents:</b> GALLOWAY, Peter, D.; Ladas & Parry, 26 West 61st Street, New York, NY 10023 (US) et al.		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AZ, BY, KG, KZ, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>

**(54) Title:** SYSTEM FOR PLAYING GAMES**(57) Abstract**

Systems for playing games are disclosed in which, in return for a donation to a charitable organisation, the donor is given the opportunity of winning a cash prize. The opportunity to play the game can be given at the end of a banking transaction carried out through an automatic teller machine. Alternatively it can be given on making a purchase at a retail outlet. In other forms dedicated hand held units are programmed with winning transactions when connected to a controlling computer. A record of the transactions in a day is stored in the unit, and then downloaded onto a central computer which calculates the amount won. At the same time winning transactions are loaded onto the unit for use before the next connection. The specification discloses the use of credit cards or dedicated cards for the hand held unit.

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SYSTEM FOR PLAYING GAMESFIELD OF THE INVENTION

THIS INVENTION relates to systems by means of which games of chance are played which benefit charitable  
5 organisations.

BACKGROUND TO THE INVENTION

Charitable organisations collect money by offering competitions such as scratch cards, draws and so on. Many include one or more questions to make the game one of  
10 skill rather than one of pure chance. However, all these methods of collection have a substantial draw-back, from the point of view of the charity, in that a percentage (possibly upwards of 25%) of the amount collected is spent on administration costs.

15 So called ATMs (which the general public calls Automatic Teller Machines although this is not what the initials mean) are now in widespread use. A wide range of banking operations can be undertaken using such machines, and many millions of transactions take place per day using ATM's.

20 More and more retail outlets are being connected, by dedicated lines, to central computers so that transactions which involve credit cards are recorded by the central computer as they take place. Even outlets which do not have a permanent connection of this nature have machines of the

Speed-Point type. These store information received from, and download information onto, central computers to which they are connected, via a telephone line, once or twice per day.

5 The object of the present invention is to provide a system where administration costs are almost entirely eliminated and which makes use of computer based infra structure which is already in place.

#### BRIEF DESCRIPTION OF THE INVENTION

10 According to a first aspect of the present invention there is provided a system including a computer, a plurality of terminals, means for connecting said terminals to said computer at intervals, each terminal including means for reading the information stored on a card and for deducting an amount from the balance available on the card,  
15 means for transmitting to said computer at each connection information pertaining to the cards that have been presented to the terminal since the last connection, and means for receiving from said computer and storing in the terminal during a connection information pertaining to the  
20 transactions which are to be winning transactions.

According to a second aspect of the present invention there is provided a system comprising a plurality of ATM's, a computer which controls operation of the ATM's, the computer having a first program which provides customers  
25 with banking facilities at the ATM and a second program which

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enables games of chance to be played at the ATM, said programs being linked so that customers are offered the option of playing a game of chance after a banking operation has been performed.

5           According to a third aspect of the present invention there is provided a method which comprises programming a computer with a first program which provides banking facilities at a plurality of ATM's which are linked to the computer, programming the computer with a program  
10 which provides at said ATM's the facility to play a game of chance, and interlinking said programs so that the option to access the second program and play a game of chance is offered to an ATM customer after the first program has been accessed for the purpose of conducting a banking operation.

15           In the event that the customer opts to play a game, it can be preceded by questions to ensure that the game is one of skill and not pure chance. The customer can be given a selection of charities to chose from and a selection of games to play. If the customer wins, the amount won is  
20 immediately transferred to the customer's account and withdrawn from the account which is maintained to receive amounts accruing from customers who were unsuccessful. If the customer is unsuccessful, his account is debited and the account of the charity credited. The financial institution  
25 can levy a small transaction fee in the same way that it levies a fee on a banking transaction.

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It is also possible for the game of chance to consist of the issue by the ATM of a ticket with a lottery number thereon. Prizes can be drawn at intervals eg weekly or monthly, and the customer can be given the choice of the  
5 draw that he wishes to enter.

It is also possible for the system to comprise a series of terminals including a modem for linking the terminal by telephone line to a remote computer and means for entering a PIN and credit card details. The credit card  
10 details can be entered via a card reader or through the same keyboard as the pin is entered. The game is played on the modem and the credit card account debited or credit as the case may be. The terminals will each have a screen on which the game is played.

15 For persons without credit cards, the terminal could be placed under the supervision of an authorized person. The player can then pay cash for a chance to play, and his winnings can also be paid out in cash. This version is less satisfactory as it involves the payment of wages to  
20 the authorized person.

Whilst the game can be played using the current form of credit card eg a non-smart card, it is possible to use a smart card. In this form losses are deducted from the smart card and winnings credited directly to it without  
25 involving the account that the owner of the smart card has at

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the banking institution.

The second program can be such that only one game can be played per banking transaction. Alternatively, the second program can be such as to prevent a second game being played within a predetermined period of hours (eg 24 hours) of an earlier game.

According to a fourth aspect of the present invention there is provided a system including a computer, means for crediting to an account held by the computer sums of money wagered by persons playing games of chance through terminals connected to the computer, and means for automatically calculating, based on the current balance standing to the credit of the account, the amount that is available for payment out to persons playing said games of chance, and for adjusting the odds against winning and/or the amount to be paid out each time a player wins, based on the amount that is available.

In the event that the terminal is "live" and interacting continuously with said computer, said means which calculates the odds and the amount to be paid out each time a player wins feeds the information continuously to the terminal. In the case of a terminal which is only connected to the computer at intervals eg once every twenty four hours, the information pertaining to odds and amounts is downloaded onto the terminal during connection and is valid until the

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next connection is made.

According to a fifth aspect of the present invention there is provided a method which comprises opening an account to which money wagered by persons who play a game of chance and fail to win is credited, and automatically calculating the odds against a win, and the amount in said account which is available to be paid out, based on the amount that is standing to the credit of the account.

It is also possible for the person playing the game to be given a choice as to the beneficiary should a wager be lost.

According to a sixth aspect of the present invention there is provided a system which comprises a plurality of ATMs and a computer which controls operation of the ATMs, the computer having a first program which provides customers with banking facilities at the ATMs, a second program which detects the rate at which bank cards are being presented to each ATM, and a third program which enables games of chance to be played at the ATMs, said programs interacting so that customers are offered the option of playing a game of chance after a banking operation has been performed provided that the second program does not detect that bank cards are being presented to the specific ATM at a rate which exceeds a predetermined rate.



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Such a system prevents games of chance being played when the usage rate of the banking facility exceeds the predetermined rate. For example, the second program can prevent access being had to the third program if bank cards  
5 are being presented at intervals of less than, say, twenty or thirty seconds over a predetermined period of time. This indicates that the ATM is in heavy use by the bank's customers. Once the presentation rate drops then the second program permits access thereafter to be had to the third  
10 program.

#### DETAILED DESCRIPTION OF THE INVENTION

The invention will now be described in more detail with reference to the following examples.

##### Example 1

15 So-called speedpoint or point of sale machines are widely used in shops, restaurants and other retail outlets. Most speedpoint machines are not permanently connected to the bank's computer. They are usually only connected to it once per day, eg after trading hours. At that time data  
20 concerning the day's transactions eg customer details and amounts to be debited to customer accounts, are downloaded from the speedpoint machine to the bank's computer. The information which reaches the speedpoint machine during the connection period comprises details of credit cards that have  
25 been invalidated and cannot be accepted.

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In accordance with the present invention information is downloaded onto the speedpoint machine during the connection period, based on the current balance in the main account. Such information can comprise the maximum  
5 amount that the speedpoint machine can pay out in the next 24 hour period, and randomly selected transactions at which payouts are to occur. Simply by way of example, the machine may be programmed to pay out not more than R100 the following day. It can also be programmed to pay out on specific  
10 transactions taking place, for example, when used by the 20th, 50th and 100th customers the following day.

Because most speedpoint machines are not interacting with the main computer, any amount won cannot be credited to the winner's account until the next time that the  
15 speedpoint machine and the computer are linked. Thus the slip issued by the machine can merely advise that the customer has won and that inspection of the customer's credit card account the next day will reveal the amount won. It is also possible for each customer who plays the game,  
20 regardless of whether the customer has won or lost, to be allocated a number that goes into a daily, weekly, or monthly draw for a larger prize than that allocated to an immediate win.

Instead of downloading information regarding  
25 payments for the next period of time, the information downloaded can simply comprise the number of permitted wins

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in said next period of time. The amount won can be calculated when the speedpoint point machine is next connected to the main computer and this calculation can be based on the current balance in the main account.

5           In the event that the speedpoint machine is permanently connected to the bank's computer, as is the case with large retail chains, the machine operates more in the manner of an ATM with constant interaction between the terminal constituted by the machine and the main computer and  
10 constant updating of odds and payouts.

#### Example 2

So-called "Smart Cards" are now being introduced. They are also referred to as "cash cards". Such cards include a "chip" or integrated circuit which is capable of storing  
15 information such as customer details and the amount of credit on the card. Customers use such cards by accessing their bank accounts and transferring a credit to the card. The card can then be used to make purchases, which are debited to the card, until such time as the credit has been used up.  
20 Such cards can be used, by interacting with a speedpoint machine or an ATM or the dedicated unit discussed below, to enable the customer to play the game or games that are available. The amount of the wager is automatically deducted from the amount standing to the credit of the card owner on  
25 the card, and any winnings are automatically credited to the

card. Thus the entire transaction is cashless.

### Example 3

A dedicated unit comprises a memory and a modem for connecting via a telephone line to the bank's computer is  
5 provided to enable persons without bank accounts and/or credit cards to take part in playing the game of chance. The unit is connected at intervals, via the modem, to the computer and the computer downloads onto it the payouts and odds for the next time interval. This information is stored  
10 on the unit's main memory. The person playing the game selects the amount he wishes to wager and pays cash and the unit then, on the basis of the data stored in its memory, determines if the bet is a winning bet or not. The person operating the unit pays out wins from the losses of previous  
15 players. When the unit is next connected to the computer, the amount that was wagered and lost, and is hence due from the operator, is credited to the main account and debited to the operator of the unit's account less the operator's commission. He, of course, retains the cash wagered and  
20 hence his income is said commission.

The odds and payouts can, with a suitable computer program, be calculated instantaneously and continuously, each calculation following a change in the amount credited to the account. Alternatively, the  
25 calculation can be undertaken at time intervals eg every

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minute, every five minutes etc.

Example 4

The following sequence is followed in respect of an ATM machine. The bank's customer inserts his or her bank card and in conventional fashion is requested to insert the relevant PIN number. Once the card and the PIN number have been verified the user goes through a banking procedure ie makes a withdrawal, makes a deposit, obtains a balance, transfers from one account to another etc. As soon as the banking procedure has been completed, the ATM user will be offered, by means of information on the screen, the opportunity to play the game of chance. Of course, if the program on the ATM has detected that the ATM is being used at a frequency above the base rate established, then the ATM will not offer the customer the chance to play a game of chance but will merely revert to the first screen so that a further banking transaction can take place.

In the event that the customer does not accept the offer to play the game the machine will revert to the first screen either automatically after a delay period or upon the customer pressing a key indicating that he or she declines.

If the customer chooses to play the game, and presses the appropriate key, a screen appears which asks the

customer to select the charity that is to be beneficiary of the amount wagered. The customer is also asked to enter the amount of the wager. The amount wagered is automatically credited to the beneficiary's account and the client's  
5 account is debited. Immediately these two transactions are completed the game appears on the screen and the customer plays the game.

Based on the amount available in the main account, and the odds prevailing at that time, the customer  
10 will either be advised of a win or a loss. In the event of a win the amount can either be transferred immediately from the main account to the customers account, or alternatively the customer can be advised to check his account the next day to ascertain what he has won.

15 The ATM then reverts to the first screen so that a further banking transaction can be carried out.

#### Example 5

A hand held card reading terminal is provided for reading cards which have information stored thereon. It will  
20 be assumed that the cards are credit cards. When a card is presented to the unit and read, the amount that is to be withdrawn from the card holder's account is automatically deducted and credited to the pool held by the unit.

The scheme's controller, which will normal be a bank or other financial institution, determines the transactions which will be winning transactions on a particular day. For example, the bank's computer might at  
5 random choose the 10th, 50th, 100th, 200th etc persons who insert cards into the unit as winners. The unit merely indicates at the time of the transaction that the person has won or lost. The information on the hand held unit ie credit card numbers, amounts deducted, and the details of the  
10 winning cards, is downloaded onto the bank's computer at the end of the working day.

The owner of the card must obtain a statement from the bank the next day to see what the amount of the win is.

15 When the hand held unit is connected via a modem to the bank, winning transactions for the next day are downloaded onto it. All calculations on the amount to be paid out, the amount to be paid to charity, the amount to be retained in the pool for the next day and the amount to be  
20 withdrawn for the scheme manager's expenses are calculated by the bank's computer.

The hand held unit can also receive a dedicated card which is purchased for a specific monetary value. The card is presented to the hand held unit and read by it. The  
25 unit can be programmed to enable the amount withdrawn from

the card to be selected or can withdraw the same amount every transaction. The card has a number stored on it and this number forms the basis of an encrypted indication of the monetary value of the card. The card can be used until its  
5 monetary value has been reduced to zero.

The unit only indicates that the person has won or has lost. The scheme manager, through one of its outlets will provide on the following working day information on the amount won.

10 The financial arrangements between the beneficiary's account and the main account from which winnings are paid can take different forms. For example, in one form the amount wagered can immediately be apportioned to the beneficiary's account and to the account from which  
15 winnings are paid. For example, 60% might be allocated to the account that pays out winnings and 40% to the beneficiary's account. A substantial percentage of the amount wagered must be returned to make the game attractive. If there is too little then the game will be unpopular. The  
20 entire amount allocated to the beneficiary's account is, in this format, available for the beneficiary to draw. As an alternative, the entire amount wagered can be paid straight into the account of the beneficiary. At the end of the business day an amount can be transferred from that account  
25 to the main account from which winnings are paid.



It will be understood that the percentage of the amount wagered that is paid out to customers does not differ significantly from the pay-outs that are made currently to winners in "scratch card" games. The advantage of the system in accordance with the present invention is that there are no administrative costs to be met. The fee automatically charged by the bank in respect of use of the ATM covers all administrative costs.

As electronic communications between businesses and residential properties on the one hand and central computers run by banks and other financial institutions on the other hand improve, for example, to provide home banking facilities, the present invention can be applied to a number of other areas. Furthermore, computers which are connected to businesses and residential properties are now coming into use which are not run by banks and other financial institutions. These computers are owned by corporations which offer home television services, cellular phone services etc. Provided a terminal can be connected to a central computer, and information can be exchanged between the terminal and the computer, the system of the present invention can be applied. Simply by way of example, it is anticipated that so-called interactive TV will enable a person at home to take part in game shows etc from their own television set. Payments will have to be made by the person taking part (almost certainly using a credit card), and thus all the facilities that are required to enable the present

invention to be applied to the system are in place.

C L A I M S

1. A system including a computer, a plurality of terminals, means for connecting said terminals to said computer at intervals, each terminal including means for  
5 reading the information stored on a card and for deducting an amount from the balance available on the card, means for transmitting to said computer at each connection information pertaining to the cards that have been presented to the terminal since the last connection, and means for receiving  
10 from said computer and storing in the terminal during a connection information pertaining to the transactions which are to be winning transactions.

2. A system comprising a plurality of ATM's, a computer which controls operation of the ATM's, the computer  
15 having a first program which provides customers with banking facilities at the ATM and a second program which enables games of chance to be played at the ATM, said programs being linked so that customers are offered the option of playing a game of chance after a banking operation has been performed.

20 3. A method which comprises programming a computer with a first program which provides banking facilities at a plurality of ATM's which are linked to the computer, programming the computer with a program which provides at  
said ATM's the facility to play a game of chance, and  
25 interlinking said programs so that the option to access the

second program and play a game of chance is offered to an ATM customer after the first program has been accessed for the purpose of conducting a banking operation.

4. A system including a computer, means for  
5 crediting to an account held by the computer sums of money  
wagered by persons playing games of chance through terminals  
connected to the computer, and means for automatically  
calculating, based on the current balance standing to the  
credit of the account, the amount that is available for  
10 payment out to persons playing said games of chance, and for  
adjusting the odds against winning and/or the amount to be  
paid out each time a player wins, based on the amount that is  
available.

5. A system as claimed in claim 4, wherein the  
15 terminal is "live" and interacting continuously with said  
computer, said means which calculates the odds and the amount  
to be paid out each time a player wins feeds the information  
continuously to the terminal.

6. A system as claimed in claim 4, and including  
20 means for connecting the terminal to the computer at  
intervals, the information pertaining to odds and amounts  
being downloaded onto the terminal during connection and  
being valid until the next connection is made.

7. A method which comprises opening an account to

which money wagered by persons who play a game of chance and fail to win is credited, and automatically calculating the odds against a win, and the amount in said account which is available to be paid out, based on the amount that is standing to the credit of the account.

8. A system which comprises a plurality of ATMs and a computer which controls operation of the ATMs, the computer having a first program which provides customers with banking facilities at the ATMs, a second program which detects the rate at which bank cards are being presented to each ATM, and a third program which enables games of chance to be played at the ATMs, said programs interacting so that customers are offered the option of playing a game of chance after a banking operation has been performed provided that the second program does not detect that bank cards are being presented to the specific ATM at a rate which exceeds a predetermined rate.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US96/02164

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : A63F 9/00

US CL : 463/1, 29, 42, 48

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 463/1, 29, 42, 48, 40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS

search terms: atm, automatic teller machine#, gamb1?, wager?  
(above classes searched by hard APS search)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US, A, 4,815,741 (SMALL) 28 March 1989, see entire document.	1-8

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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